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## WHAT IS CLAIMED IS:

- 1. The use of  $17-\beta$  estradiol or a derivative thereof in the making of a medication, for *in-situ* administration in the lumen of a blood vessel having suffered vascular injury, at the injured site, to prevent vascular intima hyperplasia, or for improving vascular endothelium function, or both, in a patient.
- An anti-restenotic composition for in-situ administration
   in the lumen of a blood vessel having suffered vascular injury, at the injured site, which comprises an effective amount of 17-β estradiol or a derivative thereof in a pharmaceutically acceptable carrier.
- A device comprising 17-β estradiol or a derivative
   thereof for in-situ delivery of an anti-restenotic amount thereof to a vascular site having suffered vascular injury.
  - 4. The use as defined in claim 1, or the composition as defined in claim 2, or the device of claim 3, wherein 17-β estradiol or a derivative thereof is present in a dose unit of 1 to 5000 µg/Kg of patient's body weight.
- The use, as defined in claim 1, or the composition as defined in claim 2, or the device of claim 3, wherein 17-β estradiol or a derivative thereof is present in a dose unit of 10 to 50 µg/Kg Kg of patient's body weight.
  - 6. The use as defined in claim 1, or the composition as defined in claim 2, or the device of claim 3, wherein  $17-\beta$  estradiol or a

derivative thereof is present in a dose unit of 10 to 30 µg/Kg Kg of patient's body weight.

- The use or the composition as defined in any one of
   claims 1, 2 and 4 to 6 wherein said pharmaceutically acceptable carrier
   comprises hydroxypropyl-beta-cyclodextrin (HPCD).
- 8. The use or the composition as defined in claim 7, wherein HPCD is present in a dose capable of solubilizing 17-beta estradiol
  10 or a derivative thereof.
- The use or the composition as defined in Claim 6, where
   17-beta-estradiol or a derivative thereof is admixed with a carrier comprising at least 0.63 mg hydroxypropyl-beta-cyclodextrin per kilogram of patient's
   body weight.